

ANNUAL REPORT

OF THE

COMMITTEE

OF THE

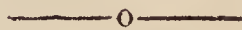
MANCHESTER AND SALFORD

SANITARY ASSOCIATION,

BEING

A Summary of their Proceedings for the Year 1872.


WITH AN APPENDIX.



MANCHESTER:

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1873.



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MANCHESTER AND SALFORD SANITARY ASSOCIATION.

Committee and Officers for the Year 1873.

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Vice-Presidents:

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The Worshipful the MAYOR of SALFORD.

The Very Rev. the DEAN of MANCHESTER.

MARQUIS of HARTINGTON.

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Sir JAS. L. BARDSLEY, M.D.

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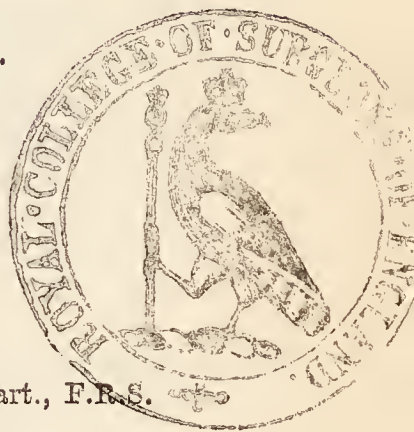
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|

Dr. ARMISTEAD.

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Dr. A. RANSOME.
J. F. ROBERTS, Esq.

Communications for the Committee may be addressed to—

THOMAS TURNER, Esq., Chairman,
77, Mosley Street.

Dr. NOBLE, Deputy Chairman,
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OLIVER HEYWOOD, Esq., Treasurer,
St. Ann's Street.

The Honorary Secretaries, { Dr. LEECH, 98, Mosley Street.
{ Dr. ARMISTEAD, Harpurhey.

Or at the Offices of the Association, 78, Cross Street.

At the ANNUAL MEETING of the Manchester and Salford Sanitary Association, held at the Royal Institution, Mosley Street, on Wednesday, June 25th, 1873 :

THOMAS TURNER, Esq., IN THE CHAIR.

The Annual Report having been read ;

It was moved by JOHN CHADWICK, Esq. ; seconded by A. G. Mc. BEATH, Esq. ;

That this Meeting cordially approving of the proceedings of the Committee, as set forth in their Report, request that the said Report may be printed and extensively circulated.

Moved by THOMAS MELLOR, Esq. ; seconded by Dr. J. B. BRIERLEY ;

That inasmuch as one of the fundamental objects of the Association is the prevention of disease, this Meeting trusts that the Committee will use every means in their power to secure all possible precautions being taken to prevent the spread of infectious disorders.

Moved by Dr. JOHN ROBERTS ; seconded by Dr. HARDIE ;

That the practical efforts of the Committee to improve the condition of the poorer classes by directing attention to the sanitary laws, deserve the encouragement and pecuniary support of this Meeting and the public in general.

Moved by Dr. PEATSON ; seconded by JOHN CHADWICK, Esq. ;

That the best thanks of the Meeting be given to the President, Vice-Presidents, Committee, and Officers for the unwearied attention they have devoted to promoting the interests of this Association ; and that the following Noblemen and Gentlemen be requested to act for the ensuing year. (For the names see third page.)

THOMAS TURNER, Chairman.

The Chair having been taken by THOMAS MELLOR, Esq. :

It was moved by Dr. PEATSON ; seconded by Dr. LEECH ;

That the thanks of the Meeting be given to THOMAS TURNER, Esq., for presiding on this occasion, and for the interest he evinces in the welfare of the Association.

REPORT.

THE Committee are glad to record that the health of the inhabitants of Manchester and Salford, as indicated by the death rate, was better in 1872 than in any former year since this Association was organised in 1854, the mortality having been at the rate of 27·2 per thousand, whilst the lowest death rate previously recorded was 27·7 per thousand. The decreased mortality is very satisfactory, but the Committee regret that during the past year they have not been able to observe such improvement in the sanitary condition of the municipalities, as will warrant the expectation of a future gradual decline in the death rate: they also regret that the changes effected in sanitary law in 1872, have not been of a character likely to benefit in any marked manner the health interests of Manchester and Salford.

In the report for last year the Committee stated, that having carefully considered Mr. Stansfeld's Public Health Bill, they had prepared some amendments which were to be introduced when the Bill was in Committee, and they expressed a hope that the Bill would shortly become law. The hope, however, was not realized. The opposition which the clauses relating to the purification of rivers met with, led to

the withdrawal of the part of the Bill which dealt with this subject, and the measure which finally received the assent of Parliament, dealt only with the creation and alteration of Urban and Sanitary districts, and the compulsory appointment of Officers of Health in these districts: it did not therefore improve the laws relating to sanitary matters in Manchester and Salford. As one of the amendments related to a subject of considerable importance, the Committee have pointed it in the Appendix, with the hope that it may be introduced in some future Act.

The Committee have recently had under consideration the Health Bill, which has been brought in by Sir Charles Adderly, and finding some important defects in it are making arrangements to have several amendments introduced when the Bill gets into Committee.

To another measure bearing on Public Health, the attention of the Committee has been specially directed. The Adulteration of Food Act, which came into force on the 10th of August last, besides increasing the penalties for adulterating food and drugs, extended the meaning of the term adulteration to the fraudulent admixture of any substance with any article of food or drink or with any drug for the purpose of increasing its weight or bulk. This extension is important, because it makes the term include a form of imposition which has long been largely practised, greatly to the detriment of the health of children in large towns. Some investigations made by the Committee, at the request of the Man-

chester Farmers' Club, showed, that though nothing but water is used for the purpose of adulteration, yet, that a large proportion of the milk retailed is mixed with from 10 to 40 per cent. of water. Such admixture is very injurious. The malnutrition of children is one cause of the high death rate in this town, and to the want of pure milk much of this malnutrition is due.

The Committee reported to the Farmers' Club, that though by means of the lactometer and cream measurer the amount of water added to milk for the purpose of adulteration might be ascertained with considerable certainty, still, that for legal purposes, a complete analysis with the use of the balance, could alone be relied on to prove adulteration. They strongly advocated the appointment of Public Analysts, by whom articles of diet and drugs, supposed to be adulterated, might be carefully examined, and who might give the evidence necessary for the conviction of those selling adulterated articles. A Public Analyst for Manchester has since been selected, and the Salford Corporation has determined to appoint a similar official. Much good will doubtless ultimately issue from these appointments.

Unfortunately, however, there is an obscurity in the Adulteration Act, which at present in many instances prevents the proper penalty being enforced where adulteration is proved. Those who sell food or drugs mixed with substances in any way noxious, can be punished even though it cannot be shown that the adulteration has been practised with their cognizance. But when an article of food is sold

to which a material, in itself harmless, has been added for the purpose of increasing the bulk of the article, it seems uncertain whether or not a guilty knowledge of the imposition on the part of the vendor must be proved in order to obtain a conviction. Thus, in some cases, the Magistrates have punished the retailers of watered milk without requiring proof that they were parties to the adulteration, or knew of the same; in others, a conviction has been refused because of the want of such proof. This uncertainty is exceedingly unfortunate, and the Committee are endeavouring to bring about an Amendment of the Act.

The returns of sickness which have been issued during the past year, show a decrease in the number of cases coming under treatment in public practice as compared with 1871. In that year 98,390 cases were reported, whilst in 1872 the cases observed only numbered 91,628. The ratio of deaths to cases has been less this year than last, in 1871 it was 1 in 26, and in 1872 1 in 29.

Of zymotic diseases, 5,265 cases have been recorded during the year in the public practice of Manchester and Salford, and of these 302 or 1 in 18 have died. Last year 7,500 cases were observed, of which 437 or 1 in 17 died.

The total number of deaths registered in Manchester and Salford during 1872 was 12,846, in 1871 it was 14,184. The following table gives the number of deaths which have occurred from zymotic disease during the last five years, and the proportions they bear to the total number of deaths registered:—

DISEASES.	1868	1869	1870	1871	1872
Whooping C'gh.	316	283	505	318	626
Scarlet Fever ..	1,510	655	349	314	420
Fever	930	552	505	380	328
Measles	279	427	72	408	124
Small Pox	13	70	76	456	104
Total	3,048	1,987	1,507	1,876	1,602
Total deaths } from all causes }	14,474	12,761	12,816	14,184	12,846

It will be seen from this table that during the past year Whooping Cough has been by far the most fatal of the zymotic diseases. An epidemic of this ailment commenced towards the end of the last quarter of 1871, and reached its height in the first quarter of 1872. During the first three months of the year, 1237 cases of Whooping Cough came under treatment, and 361 deaths from it occurred; in the second quarter the number of cases reported decreased to 726, and the deaths to 171; the third quarter showed a still further decrease, the deaths falling to 60, and the cases to 288; whilst in the fourth quarter only 34 deaths from Whooping Cough were registered, and 178 cases reported. Of the 626 deaths registered, 110 occurred in public practice.

Scarlet Fever ranks next to Whooping Cough with regard to fatality. Six hundred and eight cases of

this ailment came under treatment in public practice in 1872, of which 47 or 1 in 13 died. In the first half of the year there was no marked prevalence of Scarlet Fever, the number of cases treated in public practice for the first two quarters being 81 and 84 respectively, whilst the deaths registered in the same periods amounted to 71 and 56. The increase in the number of cases observed in the third quarter to 201, indicates that a very considerable spread of the disease took place amongst the poorer classes during that period, but the number of fatal cases registered was only 89. In the last three months of the year 241 cases came under treatment, but the deaths from Scarlet Fever rose to 204—almost as many as in the three other quarters together. It is worthy of note, that in the third quarter the register of sickness gave a more marked indication of an outbreak than the death register.

Since 1868 there has been a gradual decrease in the number of deaths registered from Fever in Manchester and Salford. Fewer deaths occurred from this cause in 1872 than during any of the ten preceding years. There is some ground for hoping that this decrease is of a permanent character. The more rigorous inspection of lodging-houses, and the stricter precautions taken to prevent the spread of infection since the officers of health were appointed in Manchester and Salford, have no doubt aided much in lessening the Fever returns.

In 1871 an epidemic of Measles prevailed, and 1995 cases of this ailment came under treatment, of

which 76 or 1 in 26 died. During the first nine months of 1872 only 142 cases were observed, and 36 deaths from Measles were registered. About the beginning of the fourth quarter an outbreak of this ailment commenced, and during the last three months of the year 210 cases came under treatment, and 98 deaths were registered. Altogether, 352 cases were observed in public practice during the year, of which 6 or 1 in 59 died.

Small Pox has been markedly less prevalent during the past year than it was in 1871. Instead of being the most fatal zymotic disease it has been the least so. During the first three months of the year 205 cases were recorded,—the epidemic which had raged in the preceding year not having completely subsided. In the second quarter the number fell to 92, whilst in the last two quarters the cases observed numbered 108 and 109 respectively. Altogether, 514 cases were met with, of which 44 or 1 in 12 died. Allowing for those who were removed to Hospital and therefore counted twice in the returns, the death rate in public practice from Small Pox was the same as last year, when 1 in 11 of those treated died.

The various zymotic diseases have prevailed to much the same extent in the boroughs of Manchester and Salford. In the former the deaths from zymotic disease form rather less than 12 per cent., and in the latter, rather more than 12 per cent. of the total mortality.

The following table gives the death rate in each borough for every 10,000 inhabitants :—

	1872				1871			
	Manchester.		Salford.		Manchester.		Salford.	
Small Pox.....	2·1	..	3·2	....	7·0	..	18·0	
Scarlet Fever	10·1	..	6·0	....	7·0	..	4·8	
Measles.....	3·2	..	1·7	....	8·5	..	12·7	
Whooping Cough	13·0	..	14·1	....	6·0	..	9·0	
Fever.....	7·0	..	6·8	....	10·8	..	6·2	

This year, as last, the deaths from Small Pox form a smaller percentage of the total number of deaths in Manchester than in Salford. In both years Scarlet Fever has been a larger contributor to the death rate in Manchester than in Salford, and in both the reverse has been the case in regard to Whooping-Cough.

Fewer cases of Diarrhœa came under treatment in 1872 than in the previous year, the number being respectively 4292 and 5791. The deaths from this cause also show a marked decrease. In 1871, 1354 deaths were registered from Diarrhœa and Dysentery, whilst in 1872 only 985 deaths were due to the same cause. In Manchester the deaths from Diarrhœa amount to 21·4, and in Salford to 19 for every ten thousand inhabitants.

Under the conviction that a large amount of the sickness and mortality arising from zymotic disease would be prevented if proper means for isolation were adopted, the Committee have constantly urged the necessity which there is for a greatly increased Hospital provision for infectious disease, and that the Corporate bodies should supply such accommodation. A Paper enforcing the views of the Committee on this subject was read in May last, by Dr. Hardie, before a joint

meeting of the Statistical Society and the Sanitary Association. The Paper will be found in the Appendix.

In August, the Manchester Corporation resolved to contribute to the maintenance of those suffering from zymotic disease who were admitted to the various Hospitals of the town within the borough. It is to be hoped that this is only a prelude to a more complete measure, and that before long the Corporate Authorities will undertake the duty which properly devolves on them, of providing accommodation for the isolation of those suffering from infectious disease.

The Cottage Sub-Committee, appointed last year, have issued a Report on the modes of dealing with excreta on the dry system, which have been tried in Manchester and Salford. In both boroughs it is proposed eventually to sweep away the ashpit middens, which have been so long condemned by the Committee of this Association, and indeed by all sanitary reformers. The arrangements proposed, to replace the ashpits, are by no means perfect, as the Sub-Committee has pointed out. But the present imperfections are capable of easy rectification; indeed, one of the most important of them in the Manchester Plan has lately been removed, and since much of the excessive mortality prevailing in Manchester and Salford is due to the horrible system of dealing with the excreta hitherto practised, it is evidently an imperative duty on the part of the Authorities to replace the present system by one in consonance with known sanitary laws.

The attention of the Committee has been drawn

to the very large number of deaths which have been caused by Whooping Cough and Measles during the last two years, no less than 1476 fatal cases of these two diseases having occurred during that time, almost all of them of course amongst young children. The foul air which so many of the young of the labouring classes continually inhale, has no doubt much to do with the fatality of these ailments among them. From the time the children are born they are continually inhaling the sewer gasses entering the houses, owing to the direct connection of the sinks with the sewers, and the emanations entering through the doors and windows from the decomposing contents of the ashpits. Such an atmosphere as they live in renders them an easy prey to the first disease which attacks them. This subject has frequently been referred to in previous Reports.

But another cause of the great fatality of Whooping-Cough and Measles is the ignorance which prevails amongst so many of the lower classes as to the management of their children, who are too often improperly fed and clad when in health, and badly nursed during sickness. To counteract the evils arising from these causes, printed directions as to feeding, clothing, and nursing, have been for some time distributed by the Association amongst the working people, and recently, special instruction as to the precautions to be adopted in Whooping-Cough and Measles, and as to the dangers arising from want of care in these events has been printed for circulation.

WHOOPIING COUGH.

During the last year 604 children have died in Manchester and Salford from Whooping Cough. The deaths of most of these children have been due to exposure to cold or damp whilst they were suffering from Whooping Cough. It is very important that when a child begins to Whoop, it should not be allowed to take cold. When children commence with Whooping Cough they should be clothed warmly and wear flannel. They should not be allowed to get wet, nor should they be starved by exposure to cold winds. If a child with Whooping Cough begins to wheeze and breathe with difficulty there is always danger. Medical advice should be obtained at once if it has not been previously sought. On no account should the child be taken out of doors. If possible it should be kept in one room altogether, and should not be exposed to draughts. It should be remembered that there is always a draught between the door or window, and the fireplace. If it is not possible to keep the child entirely in one room, endeavour to prevent its being moved from a hot to a cold room.

MEASLES.

Every year the lives of a large number of children are lost by Measles, who would probably have grown up strong men and women if they had been properly nursed. Whenever a child is supposed to have Measles it should be kept in bed, even though it may not seem very ill. On no account let a child with Measles go out, or even to the door, but keep it in bed altogether until the rash has quite gone. Bronchitis is very apt to come on if a child is exposed to cold whilst it has Measles.

The Committee are glad to observe that two Associations having the same aims as the Manchester and Salford Sanitary Association have been formed during the past year.—one at Barrow, and one in London—Such Associations will now be especially beneficial, since, through them, not only will Sanitary information be disseminated amongst the labouring classes, but opportunities will be afforded for the

interchange of ideas amongst those engaged in Sanitary work.

As in former years, the Committee have caused lectures on Sanitary subjects to be delivered in various parts of the town, but owing to the limited means at the command of the Committee, the number of these lectures has been smaller than usual.

The Committee have again to regret that their efforts to spread sanitary knowledge are limited by the smallness of the funds at their command. In order to diminish expenses, the Offices in Pall Mall have been recently exchanged for smaller and less costly rooms in Cross Street, but notwithstanding this there is a deficit amounting to £5 7s. at the end of the year.

Cases of Disease in Hospitals, and Deaths Registered during the Half-year ending June 29th, 1872.

1872.	JANUARY				FEBRUARY				MARCH					Totals for Quarter ending March 30th	APRIL				MAY				JUNE					Totals for Quarter ending June 29th	Totals for Half Year ending June 29th
	6	13	20	27	3	10	17	24	2	9	16	23	30		6	13	20	27	4	11	18	25	1	8	15	22	29		
Mean Temperature...	40.9	40.6	40.4	41.5	46.4	46.2	44.9	43.5	45.4	50.5	45.9	40.5	42.2	Quarter ending March 30th	42.4	50.5	45.3	47.5	51.9	45.2	47.7	45.9	53.6	50.1	55.0	63.6	57.8	Quarter ending June 29th	Totals for Half Year ending June 29th
Range for Week.....	11.0	23.9	17.9	18.5	17.2	17.9	14.9	18.4	15.8	22.3	19.5	23.8	33.1		22.5	28.1	21.5	24.9	28.8	14.6	20.8	26.7	22.3	25.9	27.0	32.3	25.8		
Daily Range	7.2	10.9	7.5	8.5	8.7	7.9	6.6	9.9	8.1	13.4	11.9	8.9	13.0		10.3	15.9	12.1	15.9	14.8	8.5	11.9	17.1	11.9	13.3	13.7	15.5	12.2		
Wind	s.s.w.	w.s.w.	sw.	se.n.e.	sw.s	se.	se.	sw.	sw.se.	s.se.sw	s.s.w.	n.n.e.	e.sw.n.		ne.n.w.	n.w.sw.	n.w.sw.	sw.se.	sw.	w.n.w.e	ne.	n.w.sw.	n.w.	n.w.sw.	n.w.sw	n.w.sw	n.w.sw		
Rain	1.286	.817	.713	.803	.650	.365	.490	1.176	1.355	.035	.737	.995	.935		1.371	.301	...	1.458	...	1.520	.235	.051	.874	1.181	.892	...	1.597		
Small Pox	21	34	16	26	20	15	9	12	9	12	14	14	3	205	11	13	10	5	12	3	7	...	5	6	3	11	6	92	297
Deaths	7	6	5	4	3	3	6	3	..	3	5	1	2	48	4	2	..	5	2	4	1	..	1	2	1	..	..	22	70
Measles	2	3	5	6	7	9	3	5	6	6	3	4	6	65	8	4	3	2	5	5	4	...	3	2	9	2	5	52	117
Deaths .....	..	..	2	1	1	1	..	1	1	1	..	1	1	10	..	3	..	1	..	..	..	1	3	1	..	1	..	10	20
Scarlatina	11	12	14	9	6	5	4	4	4	1	5	4	2	81	3	8	7	6	7	4	6	4	8	3	6	12	10	84	165
Deaths	7	2	9	6	8	4	5	8	5	10	1	3	3	71	7	2	4	3	7	7	4	2	..	6	4	5	5	56	127
Whooping Cough ...	67	97	96	114	116	103	113	84	102	111	89	90	55	1237	112	100	64	67	63	45	35	35	57	42	36	36	34	726	1963
Deaths	25	23	22	43	33	26	23	32	27	22	23	25	34	361	16	19	19	19	13	9	18	10	10	16	7	5	10	171	532
Diarrhoea and Dy- sentery	34	34	31	33	35	43	46	53	37	40	48	37	39	510	45	46	43	35	39	33	28	23	42	35	43	57	64	533	1043
Deaths	4	5	..	5	1	7	3	2	4	6	3	4	1	45	3	4	5	2	1	8	6	3	1	6	1	6	6	52	97
Continued, Typhus & Typhoid Fever	48	37	45	45	41	48	27	21	28	27	20	8	14	409	19	21	9	23	19	14	14	11	20	17	14	22	20	223	632
Deaths	4	7	9	9	7	6	5	8	8	5	2	8	5	83	6	4	5	5	4	2	3	6	3	3	7	3	..	51	134
Bronchitis, Catarrh Influenza, Pleu- risy, & Pneumo- nia	282	330	327	346	346	297	306	313	291	332	312	289	261	4032	265	352	301	266	282	270	248	190	278	236	192	225	194	3299	7331
Deaths	92	88	79	89	87	80	78	113	61	69	70	73	81	1060	97	91	84	83	71	64	75	72	75	77	67	40	54	950	2010
Other Diseases	1184	1330	1339	1258	1464	1407	1423	1336	1403	1493	1365	1262	1113	17407	1264	1457	1410	1313	1430	1234	1226	1110	1331	1331	1393	1410	1387	17296	34703
Deaths	120	135	137	148	125	111	132	129	141	132	136	158	135	1739	157	144	120	141	135	138	139	135	121	111	130	123	122	1716	3455
Total Deaths ..	259	266	263	305	263	233	252	296	247	248	240	273	263	3417	290	269	237	259	233	232	246	229	214	222	217	183	197	3028	6445
Total	1649	1877	1873	1867	2035	1927	1931	1828	1880	2022	1856	1708	1493	23946	1727	2001	1847	1717	1857	1608	1568	1373	1714	1672	1696	1775	1720	22305	46251

Cases of Disease in Hospitals, and Deaths Registered during the Half-year ending December 29th, 1872.

1872.	JULY				AUGUST					SEPTEMBER				Totals for Quarter ending Sept. 28th	OCTOBER				NOVEMBER					DECEMBER				Totals for Quarter ending Dec. 28th	Totals for Year ending Dec. 28th
	6	13	20	27	3	10	17	24	31	7	14	21	28		5	12	19	26	2	9	16	23	30	7	14	21	28		
Mean Temperature...	60·0	59·4	59·2	70·4	59·7	59·4	58·5	63·4	59·1	62·3	61·2	53·0	48·7	Quarter	50·7	46·5	43·0	45·9	48·4	49·5	39·7	43·2	45·9	41·2	37·7	41·1	48·3	Quarter	Year
Range for Week.....	38·2	23·5	27·4	31·5	32·7	21·6	28·7	31·2	22·7	26·1	22·2	22·8	23·9	ending	23·9	23·3	25·2	22·9	13·0	20·6	10·4	22·8	15·2	21·4	13·9	11·7	9·5	ending	ending
Daily Range	20·3	10·1	14·9	16·8	12·2	12·9	12·9	18·5	13·5	12·9	10·7	9·5	11·2	Sept.	8·2	13·2	14·9	11·7	9·1	11·1	6·9	8·9	6·6	8·0	8·0	5·2	6·6	Dec.	Dec.
Wind	NW.	SE.NW	NW.SW.	se.SW.	e.ne	se.SW.	w.e.s.	ne.e.se	w.nw.	se.	w.WSW	nw.SW.	nw.SW.	28th	nw.SW.	sw.W.	nw.ne.	nw.s.	sw.	w.	n.ne.	s.	sw.se.	n.se	n.ne. nw.	ne.se	s.sw.se	28th	28th
Rain	·629	5·250	·050	·521	·853	...	·560	·090	·464	...	·951	·942	2·484		1·037	1·274	·170	1·652	·930	·897	·260	·604	1·642	·496	·898	·787	·385		
Small Pox	7	15	21	11	7	10	12	5	1	4	8	2	5	108	5	3	5	4	10	7	9	11	14	12	12	13	4	109	514
Deaths	1	1	3	1	1	..	3	..	1	..	..	2	1	14	..	1	..	3	1	4	2	2	1	3	..	2	1	20	104
Measles	3	3	1	2	2	...	2	2	3	3	3	1	...	25	6	6	9	6	20	19	12	19	14	27	23	28	21	210	352
Deaths .....	..	1	1	3	..	..	..	1	..	..	..	..	..	6	1	2	5	6	2	8	3	9	8	10	15	14	15	98	124
Scarlatina	9	14	17	22	13	13	19	18	10	11	13	25	17	201	15	20	25	16	21	18	16	22	17	26	16	14	16	242	608
Deaths	8	8	8	12	7	3	8	8	6	6	4	7	4	89	14	15	14	16	12	16	8	12	18	22	19	19	19	204	420
Whooping Cough ...	40	31	26	38	26	19	18	16	13	16	19	16	10	288	12	13	17	16	22	21	9	8	24	7	8	9	12	178	2429
Deaths	9	3	6	7	4	4	6	3	3	3	2	5	5	60	6	1	2	3	..	1	7	4	..	3	1	3	3	34	626
Diarrhœa and Dy- senteria	76	90	93	169	282	269	256	257	285	195	216	205	157	2550	125	94	86	56	41	41	35	39	39	45	36	34	28	699	4292
Deaths	9	13	19	25	80	96	65	73	81	82	70	69	59	741	42	21	16	13	8	6	9	8	5	2	7	8	2	147	985
Continued, Typhus & Typhoid Fever }	16	8	11	17	14	13	29	26	38	33	49	40	38	332	48	34	25	26	40	25	32	33	30	24	16	34	31	398	1362
Deaths	8	6	4	3	4	1	2	6	5	6	10	9	5	69	8	10	15	10	16	9	6	4	6	15	11	7	8	125	328
Bronchitis, Catarrh Influenza, Pleu- risy, & Pneumo- nia	186	167	175	152	156	137	132	157	151	136	162	186	220	2117	217	266	311	292	325	329	289	360	354	342	306	340	280	4011	13459
Deaths	48	47	36	42	35	30	33	33	39	41	42	36	40	502	50	33	57	59	48	53	65	83	74	67	84	81	73	827	3339
Other Diseases	1345	1290	1334	1367	1298	1352	1376	1319	1421	1360	1380	1355	1171	17368	1297	1263	1338	1300	1415	1372	1214	1273	1238	1262	1199	1113	1257	16541	68612
Deaths	114	96	109	137	111	126	126	134	134	154	152	144	133	1671	123	154	145	141	128	149	124	133	142	121	153	155	126	1794	6920
Total Deaths ..	197	175	186	230	242	260	243	258	269	293	280	272	247	3152	244	237	254	251	215	246	224	255	254	243	290	289	247	3249	12846
Total	1682	1618	1678	1778	1798	1813	1844	1800	1922	1758	1850	1830	1618	22989	1725	1699	1816	1716	1894	1832	1616	1765	1730	1745	1616	1585	1549	22388	91628

The Treasurer in Account with the Manchester and Salford Sanitary Association.

Dr.		Cr.	
JANUARY 1st, TO DECEMBER 31st, 1872.			
	£ s. d.		£ s. d.
To Balance in Bank, January 1st, 1872	45 10 8	By Rent and Taxes—Six Quarters	63 0 0
„ Subscriptions	198 14 0	„ Printing—Four Quarters	73 4 0
„ Sale of Tracts and Cards	0 10 9	„ Secretary's Salary	60 0 0
„ Sale of Old Office Furniture	2 10 0	„ Commission allowed Collector.....	9 19 0
„ Balance	3 14 4	„ Removal to and Fitting up New Office.....	8 13 0
		„ Postages and Stamp Wrappers	3 15 11
		„ Expenses attending Lectures	7 4 0
		„ Advertising	1 19 3
		„ Stationery, Books, &c.	3 6 0
		„ Petty Cash, including Boy	19 18 1
			<hr/>
			£250 19 9

ASSETS AND LIABILITIES.

January 1st, 1873.	£	s.	d.
To Balance owing by Cartledge's Executors	21	12	10
"	5	7	0
By Printing	23	5	6
„ Secretary	3	14	4
	26	19	10
	£26	19	10

Donations in former Years.

	£	s.	d.
Atherton Miss (1866)	50	0	0
A Friend, per Dr. Morgan, (December, 1870)	50	0	0
A Friend, per T. Turner, Esq., (1866)	10	0	0
Barbour Robert, Esq	10	0	0
Bazley T. Sebastian, Esq., Little Grove, East Barnet, Herts.	5	5	0
Binyon Miss (Clifton)... ..	5	0	0
Brooks Samuel, Esq.	50	0	0
Chadwick R., Esq.	20	0	0
Callender W. R., Senior, Esq.	5	0	0
Ditto ditto second donation (1867)	5	0	0
Coultate E., Esq.	5	0	0
Ellesmere the Earl of	5	0	0
Gardner Robert, Esq.	5	5	0
Gillibrand P., Esq.	5	0	0
Heywood E. S., Esq.	20	0	0
Heywood Oliver, Esq.... ..	15	0	0
Houldsworth Henry, Esq.	10	0	0
Heywood James, Esq.... ..	5	5	0
Heywood Sir B., Bart	5	5	0
Heywood Arthur H., Esq	5	0	0
Jones R. Jennings, Esq.... ..	5	0	0
Jones W. C., Esq... ..	5	0	0
Manchester, the late Lord Bishop of	10	0	0
Mackintosh Messrs. C., and Co... ..	5	5	0
Potters and Norris, Messrs.	5	5	0
Plant James, Esq... ..	5	0	0
Spafford George, Esq.	5	5	0
Schunk, Souchay, and Co., Messrs.	5	0	0
Taylor J. E., Esq	5	5	0
Todd and Coston, Messrs	5	0	0
Turner J. Aspinall, Esp., M.P.	5	0	0
Watkin W. B., Esq..... ..	10	0	0
Wood W. Rayner, Esq	5	0	0

SUBSCRIPTIONS.

	£	s.	d.
Atherton James, Esq., Bridgewater-place	2	2	0
Andrew Henry, Esq., 13, Bread-street, High-street... ..	1	1	0
Atkinson and Gould, Messrs., 6, Mosley-street	1	1	0
Atwell G. H., Esq., 18, Church-street, Altrincham... ..	1	1	0
Barbour, Messrs. R., and Brother, Aytoun-street... ..	2	2	0
Behrens Messrs. S. L., and Co., 22, Oxford-street	2	2	0
Bellhouse Messrs. J. and W., Mynshull Mills, Old Garratt... ..	2	2	0
Brooks William Cunliffe, Esq., the Bank, King-street. ...	2	2	0
Brown Messrs. J., Son and Co., Portland-street	2	2	0
Butterworth and Brooks, Messrs., Charlotte-street... ..	2	2	0
Bank of England, King-street... ..	1	1	0
Bannerman J. A., Esq., 33, York-street	1	1	0
Bardsley Sir James L., M.D., 1, Sydney-street	1	1	0
Bazley Sir Thomas, Bart., M.P.	1	1	0
Behrens Louis, Esq., 41, Portland-street... ..	0	10	6
Binyons, Robinson, and Co., Messrs., St. Ann's-square... ..	1	1	0
Booth William, Esq., 43, Oldham-street... ..	1	1	0
Boutflower A., Esq., Bury New-road	1	1	0
Bradshaw and Co., Messrs. J., Artillery-street	1	1	0
Bright Messrs., and Brothers, Spring Gardens... ..	1	1	0
Browne Dr. Henry, 244, Oxford-street	1	1	0
Buckley Sir Edmund, Bart., Ducie-street, Piccadilly ...	1	1	0
Barker N., Esq., Rusholme... ..	0	10	6
Bolderson J., Junr., Esq., 86, Bury New-road.	0	10	6
Bromiley Messrs., and Sons., 3, Cateaton-street	0	10	6
Carlton, Walker, and Watson, Messrs., 11, Mosley-st. ...	2	2	0
Calvert Dr. F. Crace, Bond-street	1	1	0
Carver, Brothers, and Co., Messrs., 7, Lower Mosley-st... ..	1	1	0
Cawley C. E., Esq., M.P., Carlton Buildings, Cooper-st. ...	1	1	0
Chadwick David, Esq., 64, Cross-street	1	1	0
Charlewood H., Esq., 5, Clarence-street... ..	1	1	0

	£	s.	d.
Chadwick John, Esq., Great Bridgewater-street	2	2	0
Collins Edward, Esq., Corn Mills, 35, Long Millgate ...	1	1	0
Cooke Thomas, Esq., District Bank, Spring Gardens... ..	1	1	0
Cowlshaw, Nicol, and Co., Portland-street	1	1	0
Crum Walter, Messrs., and Co., Portland-street	1	1	0
Cunliffe and Sons, Messrs., Bond-street, Ardwick	1	1	0
Curtis John, Esq., Roseleigh, Heaton Chapel	1	1	0
Carlisle, Douglas, and Co., Messrs., 85, Mosley-street ...	1	0	0
Carver William, and Co., Messrs., 15, Mosley-street	1	0	0
Corbett J., Esq., 78, Cross-street	0	10	6
D'Hauregard Messrs. H., and Co., Little Lever-street... ..	1	1	0
Dugdale Messrs. John, and Brothers., Booth-street... ..	1	1	0
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Farbridge and Holliday, Messrs., 57, King-street	1	1	0
Findlater and Mackie, Messrs., Bank-street	1	1	0
Fryer, Benson, and Foster, Messrs., Chester-st., Oxford-st.	1	1	0
Fullarton John Alexander, Esq., 49, Major-street... ..	1	1	0
Franklin J. A., Esq., Bury New Road... ..	0	10	0
Galloway Messrs. W. and J., Chester-road, Hulme	2	2	0
Gladstone Robert, Esq., 4, Half-moon-street	2	2	0
Grafton F. W., Esq., Portland-street	2	2	0
Greg, Brothers, and Co., Messrs., Booth-street... ..	2	2	0
Greg Francis, Esq., Booth-street	2	2	0
Galloway Messrs. J., and Co., 7, Mosley-street... ..	1	1	0
Gaskell Rev. William, 46, Plymouth-grove	1	1	0
Gibson Rev. Canon, Polygon, Ardwick	1	1	0
Gladstone Murray, Esq., Cross-street	1	1	0
Goldschmidt Philip, Esq., Albert-square	1	1	0
Graham Messrs. William, and Co., 86, Major-street	1	1	0
Grover J. B. K., Esq., 1, Elm-street, Water-street	1	1	0
Gaddum F. E., Esq., South-street..... ..	1	1	0
Harter William, Esq., Cheapside, King-street... ..	2	2	0
Heywood Arthur H., Esq., Bank, St. Ann's-street... ..	2	2	0
Heywood E. S., Esq., „ „ „ ..	2	2	0
Heywood Oliver, Esq., „ „ „ ..	2	2	0
Hunter Thomas, Esq., Cheapside, King-street... ..	2	2	0
Hadfield George, Junr., Esq., 32, Fountain-street... ..	0	10	6
Harrison G. Morley, Esq., 30, Ardwick Green	0	10	6

	£	s.	d.
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James and Chabot, Messrs., Portland-street... ..	1	1	0
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Joule Dr., Lower Broughton	0	10	0
Keighley, J., Esq., York-street	1	1	0
Kershaw, Sidebottom, and Co., Messrs., Portland-street ...	1	1	0
Kessler William, Esq., 33, Dale-street... ..	1	0	0
Langton Wm., Esq., M'chester and Salford Bank, Mosley-st	2	2	0
Lee Messrs. Daniel, and Co., Fountain-street.....	2	2	0
Leisler John, Esq., Messrs. Du Fay and Co., Booth-street...	2	2	0
Langworthy, Brothers, and Co., Messrs., Charlotte-street	1	1	0
Lamb James, Esq., John Dalton-street	1	1	0
Lund Edward, Esq., St. John-street, Deansgate... ..	1	1	0
Lyon, Lord, and Co., Messrs., David-street	1	1	0
Macintosh Messrs. Charles, and Co., Cambridge-street ...	2	2	0
M'Laren Messrs. James, and Nephew, 18, George-street.	2	2	0
M'Connel W., Esq., Henry-street, Ancoats... ..	2	2	0
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M'Clure Messrs. John, and Son, Bond-street... ..	1	1	0
M'Naughton and Thom, Messrs., 80, Mosley-street... ..	1	1	0
M'Niven Charles, Esq., Charlotte-street... ..	1	1	0
Makin Messrs. J., and Son., 17, Mosley-street... ..	1	1	0
Manchester, the Right Rev. Lord Bishop of... ..	1	1	0
Mellor Thomas, Esq., 204, Clairville, Oxford-street... ..	1	1	0
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Newton John, Esq., Carlton-buildings... ..	1	1	0
Nicholls B., Esq., York House, Oxford-road... ..	1	1	0
Noble Dr., 32, Ardwick Green	1	1	0
Ogden Henry, Esq., 126, Deansgate... ..	0	10	6
Oxley Edwin, Esq., 43, Port-street.....	0	10	0
Peel Messrs. J. and G., Pollard-street, Ancoats	2	2	0
Peel, Messrs. John, and Co., 11, Peel-street, Duke-street	2	2	0

	£	s.	d.
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Parlane James, Esq., Victoria Park	1	0	0
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Ransome Dr. Arthur, Peel-terrace, Bowdon	1	1	0
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Rickards F. P., Esq., Brazennose-street	1	1	0
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Robertson Charles, Esq., Alexandra-road	1	1	0
Rice J., Esq., Consolidated Bank, Pall Mall	0	5	0
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Schofield Thomas, Esq., Cornbrook	1	1	0
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Smith Dr. R. Angus, York-place, Rusholme	1	1	0
Stoehr Messrs. E. M. and Co., Deansgate	1	1	0
Schwind Charles, Esq., Bowdon	1	0	0
Standring John, Esq., 18, Fountain-street	1	0	0
Stowell Rev. T. A., M.A., 27, Crescent	0	10	6
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Williams Messrs. L. and E., Upton-street, London-road...	1	1	0
Wood M. Bateson Esq., 19, Princess-street	1	1	0
Worthington Thomas, Esq., King-street	1	1	0
Wilkinson T. R., Esq., Manchester and Salford Bank... ..	0	10	6
Williams Mr. Councillor, 1, Marlborough-square	0	10	6

